## Amendments to the claims

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claim 76 and amend claim 1 as follows:

## WHAT IS CLAIMED IS:

1. (currently amended) A compound selected from  $\frac{Formula}{Formula}$  II, IV, V, VII-IX and XI

$$R^{6}-N$$
 $R^{6}-N$ 
 $R^{6$ 

or a pharmaceutically acceptable salt thereof, wherein

X is C (carbon);

 $R^1$  is selected from H,  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_{10}$  cycloalkyl, ( $C_3$ - $C_{10}$  cycloalkyl)  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkynyl, cyano, halo,  $C_1$ - $C_6$  haloalkyl,  $OR^7$ ,  $C_1$ - $C_6$  alkyl- $OR^7$ ;  $C_1$ - $C_6$ 

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cyanoalkyl, NR<sup>8</sup>R<sup>9</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-NR<sup>8</sup>R<sup>9</sup>;

 $R^2$  is H,

 $C_1$ - $C_6$  alkyl which optionally forms a  $C_3$ - $C_6$  aminocarbocycle or a  $C_2$ - $C_5$  aminoheterocycle with A or B, each optionally substituted at each occurrence with  $R^7$ ,  $C_3$ - $C_{10}$  cycloalkyl, or

(C<sub>3</sub>-C<sub>10</sub> cycloalkyl) C<sub>1</sub>-C<sub>6</sub> alkyl;

or R<sup>2</sup> and R<sup>6</sup> jointly with the 2 nitrogen atoms to which they are bound a C<sub>2</sub>-C<sub>5</sub> aminoheterocycle optionally substituted with R<sup>7</sup>;

- A is  $(CH_2)_m$ , where m is 1,2 or 3 and is optionally mono- or di-substituted on each occurrence with  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_{10}$  cycloalkyl,  $(C_3$ - $C_{10}$  cycloalkyl)  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  alkenyl,  $C_1$ - $C_6$  alkynyl, cyano, halo,  $C_1$ - $C_6$  haloalkyl,  $OR^7$ ,  $C_1$ - $C_6$  alkyl- $OR^7$ ;  $C_1$ - $C_6$  cyanoalkyl,  $NR^8R^9$ ,  $C_1$ - $C_6$  alkyl- $NR^8R^9$ , or
- A and B jointly form a C<sub>3</sub>-C<sub>6</sub> carbocycle, optionally substituted at each occurrence with R<sup>7</sup> or,

A and R<sup>2</sup> jointly form a C<sub>3</sub>-C<sub>6</sub> aminocarbocycle or a C<sub>2</sub>-C<sub>5</sub> aminoheterocycle optionally substituted at each carbon occurrence with R<sup>7</sup>;

- B is (CH<sub>2</sub>)<sub>n</sub>, where n is 1,2 or 3 and is optionally mono- or di-substituted on each carbon atom with C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, (C<sub>3</sub>-C<sub>10</sub> cycloalkyl) C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, cyano, halo, C<sub>1</sub>-C<sub>6</sub> haloalkyl, OR<sup>7</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-OR<sup>7</sup>; C<sub>1</sub>-C<sub>6</sub> cyanoalkyl, NR<sup>8</sup>R<sup>9</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-NR<sup>8</sup>R<sup>9</sup>, or
- B and  $R^2$  jointly form a  $C_3$ - $C_6$  aminocarbocycle or a  $C_2$ - $C_5$  aminoheterocycle optionally substituted at each <u>carbon</u> occurrence with  $R^7$ ;
- R³ and R¹6 are independently selected at each occurrence from H, C₁-C6 alkyl, C₃-C₁0 cycloalkyl, (C₃-C₁0 cycloalkyl) C₁-C6 alkyl, C₁-C6 alkenyl, C₂-C6 alkynyl, cyano, halogen, C₁-C6 haloalkyl, OR³, C₁-C6 alkyl-OR³, C₁-C6 cyanoalkyl, NR²R², C₁-C6 alkyl-NR²R²;

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R<sup>4</sup> is selected from aryl or heteroaryl, each optionally substituted with 1 to 5 substituents independently selected at each occurrence from C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkenyl, halogen, C<sub>1</sub>-C<sub>6</sub> haloalkyl, trifluromethylsulfonyl, OR<sup>7</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-OR<sup>7</sup>, NR<sup>8</sup>R<sup>9</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-NR<sup>8</sup>R<sup>9</sup>, CONR<sup>8</sup>R<sup>9</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-CONR<sup>8</sup>R<sup>9</sup>, COOR<sup>7</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-COOR<sup>7</sup>, CN, C<sub>1</sub>-C<sub>6</sub> alkyl-CN, SO<sub>2</sub>NR<sup>8</sup>R<sup>9</sup>, SO<sub>2</sub>R<sup>7</sup>, aryl, heteroaryl, heterocycloalkyl, 3-, 4-, or 5-(2-oxo-1,3-oxazolidinyl), with the proviso that at least one of the positions ortho or para to the point of attachment of the aryl or heteroaryl ring to the heterocyclic core is substituted;

## R<sup>5</sup> is selected from:

C<sub>1</sub>-C<sub>6</sub> alkyl, (C<sub>3</sub>-C<sub>10</sub> cycloalkyl) C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, each of which is substituted with 1 to 5 groups independently selected at each occurrence from halo, C<sub>1</sub>-C<sub>2</sub> haloalkyl, OR<sup>7</sup>, cyano, NR<sup>8</sup>R<sup>9</sup>, CONR<sup>8</sup>R<sup>9</sup>, COOR<sup>7</sup>, SO<sub>2</sub>NR<sup>8</sup>R<sup>9</sup>, SO<sub>2</sub>R<sup>7</sup>, NR<sup>11</sup>CO R<sup>12</sup>, N R<sup>11</sup>SO<sub>2</sub>R<sup>7</sup>;

- C<sub>1</sub>-C<sub>6</sub> arylalkyl, C<sub>1</sub>-C<sub>6</sub> heteroarylalkyl, C<sub>5</sub>-C<sub>8</sub> arylcycloalkyl, or C<sub>5</sub>-C<sub>8</sub> heteroarylcycloalkyl, where aryl is phenyl or naphthyl, and heteroaryl is 2-,3-, or 4-pyridyl, 2-, 4- or 5-pyrimidinyl, triazinyl, 1-, 2-, or 4-imidazolyl, 2-, 4-, or 5-oxazolyl, isooxazolyl, indolyl, pyrazolyl, 1-, 3- or 4-triazolyl, 2-triazinyl, 2-pyrazinyl, 2-, or 3-furanyl, 2-, or 3-thienyl, 2-, or 3-benzothienyl, or 1-, 2- or 5-tetrazolyl, each of which is optionally substituted with 1 to 5 substituents independently selected at each occurrence from C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkenyl, (C<sub>3</sub>-C<sub>10</sub> cycloalkyl) C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkenyl, halogen, C<sub>1</sub>-C<sub>6</sub> haloalkyl, trifluromethylsulfonyl, OR<sup>7</sup>, NR<sup>8</sup>R<sup>9</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-OR<sup>7</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-NR<sup>8</sup>R<sup>9</sup>, CONR<sup>8</sup>R<sup>9</sup>, COOR<sup>7</sup>, CN, SO<sub>2</sub>NR<sup>8</sup>R<sup>9</sup>, SO<sub>2</sub>R<sup>7</sup>, aryl, heteroaryl, heterocycloalkyl, 3-, 4-, or 5-(2-oxo-1,3-oxazolidinyl), wherein with the proviso that 2 adjacent alkyl substituents can optionally form together a C<sub>3</sub>-C<sub>10</sub> cycloalkyl ring, a C<sub>3</sub>-C<sub>10</sub> cycloalkenyl ring or a heterocycloalkyl ring;
- C<sub>3</sub>-C<sub>10</sub> cycloalkyl, (C<sub>3</sub>-C<sub>10</sub> cycloalkyl) C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkenyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, each of which is optionally with 1 to 6 substituents independently selected at each occurrence from C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkenyl, (C<sub>3</sub>-C<sub>10</sub>

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cycloalkyl) C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkenyl, halogen, C<sub>1</sub>-C<sub>6</sub> haloalkyl, OR<sup>7</sup>, NR<sup>8</sup>R<sup>9</sup>, with the proviso that when two OR<sup>7</sup> or NR<sup>8</sup>R<sup>9</sup> substituents are geminally located on the same carbon R<sup>7</sup> is not H and they can form together a C<sub>2</sub>-C<sub>4</sub> ketal, oxazoline, oxazolidine, imidazoline, or imidazolidine heterocycle, C<sub>1</sub>-C<sub>6</sub> alkyl-OR<sup>7</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-NR<sup>8</sup>R<sup>9</sup>, CONR<sup>8</sup>R<sup>9</sup>, COOR<sup>7</sup>, CN, oxo, hydroximino, C<sub>1</sub>-C<sub>6</sub> alkoximino, SO<sub>2</sub>NR<sup>8</sup>R<sup>9</sup>, SO<sub>2</sub>R<sup>7</sup>, heterocycloalkyl, aryl, heteroaryl, where aryl or heteroaryl is optionally substituted with 1 to 5 substituents independently selected at each occurrence from C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl) C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>6</sub> alkenyl, halogen, C<sub>1</sub>-C<sub>6</sub> haloalkyl, trifluromethylsulfonyl, OR<sup>7</sup>, NR<sup>8</sup>R<sup>9</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-OR<sup>7</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-NR<sup>8</sup>R<sup>9</sup>, CONR<sup>8</sup>R<sup>9</sup>, COOR<sup>7</sup>, CN, SO<sub>2</sub>NR<sup>8</sup>R<sup>9</sup>, SO<sub>2</sub>R<sup>7</sup>, aryl, heteroaryl, heterocycloalkyl, 3-, 4-, or 5-(2-oxo-1,3-oxazolidinyl), wherein with the proviso that 2 adjacent alkyl substituents can optionally form together a C<sub>3</sub>-C<sub>10</sub> cycloalkyl ring, a C<sub>3</sub>-C<sub>10</sub> cycloalkenyl ring or a heterocycloalkyl ring;

- aryl or heteroaryl, optionally substituted with 1 to 5 substituents independently selected at each occurrence from halogen,  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_{10}$  cycloalkyl,  $C_3$ - $C_{10}$  cycloalkyl)  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  alkenyl, halogen,  $C_1$ - $C_6$  haloalkyl, trifluromethylsulfonyl,  $OR^7$ ,  $NR^8R^9$ ,  $C_1$ - $C_6$  alkyl- $OR^7$ ,  $C_1$ - $C_6$  alkyl- $NR^8R^9$ ,  $CONR^8R^9$ ,  $COOR^7$ , CN,  $SO_2NR^8R^9$ ,  $SO_2R^7$ , aryl, heteroaryl, heterocycloalkyl, 3-, 4-, or 5-(2-oxo-1,3-oxazolidinyl), wherein with the proviso that 2 adjacent alkyl substituents may optionally form together a  $C_3$ - $C_{10}$  cycloalkyl ring, a  $C_3$ - $C_{10}$  cycloalkenyl ring or a heterocycloalkyl ring; or
- 3- or 4-piperidinyl, 3-pyrrolidinyl, 3- or 4- tetrahydropyranyl, 3-tetrahydrofuranyl, 3- or 4-tetrahydropyranyl, 3- or 4-(1,1-dioxo) tetrahydrothiopyranyl, 1-azabicyclo[4.4.0]decyl, 8-azabicyclo[3.2.1]octanyl, norbornyl, quinuclidinyl, each optionally substituted with 1 to 5 substituents independently selected at each occurrence from R<sup>7</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-OR<sup>7</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-NR<sup>8</sup>R<sup>9</sup>, CONR<sup>8</sup>R<sup>9</sup>, COOR<sup>7</sup>;
- R<sup>6</sup> is selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, (C<sub>3</sub>-C<sub>10</sub> cycloalkyl) C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>4</sub> alkenyl, C<sub>1</sub>-C<sub>6</sub> arylalkyl, C<sub>1</sub>-C<sub>6</sub> heteroarylalkyl where aryl or heteroaryl are optionally substituted with 1 to 5 substituents independently selected at each occurrence from halogen, C<sub>1</sub>-C<sub>6</sub> haloalkyl, OR<sup>13</sup>, NR<sup>8</sup>R<sup>9</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-OR<sup>13</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-NR<sup>8</sup>R<sup>9</sup>,

CONR<sup>8</sup>R<sup>9</sup>, COOR<sup>7</sup>, CN, SO<sub>2</sub>NR<sup>8</sup>R<sup>9</sup>, SO<sub>2</sub>R<sup>7</sup>,

or R<sup>6</sup> and R<sup>2</sup>, as mentioned above, jointly form, with 2 nitrogen atoms to which they are bound a C<sub>2</sub>-C<sub>5</sub> aminoheterocycle optionally substituted at each position with R<sup>7</sup>;

 $R^7$  is H,  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_{10}$  cycloalkyl,  $C_3$ - $C_{10}$  cycloalkyl,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_3$  haloalkyl,

or heterocycloalkyl, C<sub>1</sub>-C<sub>8</sub> alkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, C<sub>1</sub>-C<sub>8</sub> alkanoyl, aroyl, heteroaroyl, aryl, heteroaryl, C<sub>1</sub>-C<sub>6</sub> arylalkyl or C<sub>1</sub>-C<sub>6</sub> heteroarylalkyl each optionally substituted with 1 to 5 substituents independently selected at each occurrence from halogen, C<sub>1</sub>-C<sub>6</sub> haloalkyl, OR<sup>13</sup>, NR<sup>8</sup>R<sup>9</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-OR<sup>13</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl-NR<sup>8</sup>R<sup>9</sup>, CONR<sup>8</sup>R<sup>9</sup>, COOR<sup>13</sup>, CN, SO<sub>2</sub>NR<sup>8</sup>R<sup>9</sup>, and SO<sub>2</sub>R<sup>13</sup>, with the proviso that when R<sup>7</sup> is SO<sub>2</sub>R<sup>13</sup>, R<sup>13</sup> cannot be H;

R<sup>8</sup> and R<sup>9</sup> are independently selected at each occurrence from H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>3</sub>-C<sub>10</sub> cycloalkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, heterocycloalkyl, C<sub>1</sub>-C<sub>8</sub> alkanoyl, aroyl, heteroaroyl, aryl, heteroaryl, C<sub>1</sub>-C<sub>6</sub> arylalkyl or C<sub>1</sub>-C<sub>6</sub> heteroarylalkyl, or R<sup>8</sup> and R<sup>9</sup>, taken together, can form a C<sub>3</sub>-C<sub>6</sub> aminocarbocycle or a C<sub>2</sub>-C<sub>5</sub> aminoheterocycle each optionally substituted at each occurrence with C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkenyl, (C<sub>3</sub>-C<sub>10</sub> cycloalkyl) C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>1</sub>-C<sub>3</sub> haloalkyl, or heterocycloalkyl, C<sub>1</sub>-C<sub>8</sub> alkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, C<sub>1</sub>-C<sub>6</sub> heteroarylalkyl;

 $R^{11}$  is selected from H,  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_{10}$  cycloalkyl, ( $C_3$ - $C_{10}$  cycloalkyl)  $C_1$ - $C_6$  alkyl;

R<sup>12</sup> is selected from H, aryl, heteroaryl, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, (C<sub>3</sub>-C<sub>10</sub> cycloalkyl) C<sub>1</sub>-C<sub>6</sub> alkyl, optionally substituted with OR<sup>7</sup>, NR<sup>8</sup>R<sup>9</sup>, C<sub>3</sub>-C<sub>6</sub> aminocarbocycle, or C<sub>2</sub>-C<sub>5</sub> aminoheterocycle;

R<sup>13</sup> is independently selected at each occurrence from H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, (C<sub>3</sub>-

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 $C_{10}$  cycloalkyl)  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkenyl,  $C_2$ - $C_6$  alkynyl,  $C_1$ - $C_6$  haloalkyl, with the proviso that for  $SO_2NR^8R^9$ ,  $SO_2R^{13}$ ,  $R^{13}$  cannot be H;

- $R^{14}$ -is H,  $C_1$ - $C_6$ -alkyl,  $C_3$ - $C_{10}$ -cycloalkyl,  $(C_3$ - $C_{10}$ -cycloalkyl)  $C_1$ - $C_6$ -alkyl,  $C_2$ - $C_4$ -alkenyl,  $C_2$ - $C_4$ -alkenyl,  $C_2$ - $C_4$ -alkynyl, halo, or CN; and
- $R^{15}$  is selected at each occurrence from H,  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_{10}$  cycloalkyl, ( $C_3$ - $C_{10}$  cycloalkyl)  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkenyl,  $C_2$ - $C_6$  alkynyl,  $C_2$ - $C_6$  alkyl- $OR^7$ ,  $C_2$ - $C_6$  cyanoalkyl,  $C_2$ - $C_6$  alkyl- $NR^8R^9$ .
- 2-91. (canceled)